1 We claim:

2 1. A compound represented by A:

4 A

5 wherein

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R is H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, thioalkyl, alkenyl, alkynyl, aryl,

heteroaryl, aralkyl, heteroaralkyl, acyl, aminoacyl, hydroxyacyl, thioacyl, -CO₂H, -

8 (CH₂)_d-R₈₀, or an amino acid radical;

9 R₈₀ is independently for each occurrence carboxaldehyde, carboxylate, carboxamido,

alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl,

11 heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid,

12 (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor;

d is an integer in the range 0 to 12 inclusive;

m is an integer in the range 0 to 6 inclusive;

n is an integer in the range 0 to 6 inclusive;

L is independently for each occurrence selected from the group consisting of

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$$R^1$$
 R^1
 R^1

each instance of R¹ is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and -(CH₂)_d-R₈₀.

- 10 2. The compound of claim 1, wherein said compound is complexed with a radionuclide.
- The compound of claim 1, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.
- 13 4. A compound represented by B:

15 B

wherein

R is H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, thioalkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, aminoacyl, hydroxyacyl, thioacyl, -CO₂H, - (CH₂)_d-R₈₀, or an amino acid radical;

each instance of R¹ is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro,

- sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl,
- 2 carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl,
- selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal,
- 4 amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide,
- bydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea,
- 6 and $-(CH_2)_d R_{80}$;
- R₈₀ is independently for each occurrence carboxaldehyde, carboxylate, carboxamido,
- 8 alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl,
- 9 heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid,
- 10 (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor;
- d is an integer in the range 0 to 12 inclusive;
- m is an integer in the range 0 to 6 inclusive; and
- n is an integer in the range 0 to 6 inclusive.
- 14 5. The compound of claim 4, wherein said compound is complexed with a radionuclide.
- 15 6. The compound of claim 4, wherein said compound is complexed with a radionuclide,
- wherein said radionuclide is technetium or rhenium.
- 17 7. The compound of claim 4, wherein m is 1.
- 18 8. The compound of claim 4, wherein n is 1.
- 19 9. The compound of claim 4, wherein m is 1; and n is 1.
- 20 10. The compound of claim 4, wherein R¹ is hydrogen.
- 21 11. The compound of claim 4, wherein m is 1; n is 1; and R¹ is hydrogen.
- 22 12. The compound of claim 4, wherein R is -(CH₂)_d-R₈₀.
- 23 13. The compound of claim 4, wherein m is 1; n is 1; R¹ is hydrogen; and R is -(CH₂)_d-R₈₀.
- 24 14. The compound of claim 4, wherein m is 1; n is 1; R¹ is hydrogen; and R is -(CH₂)_d-R₈₀;
- wherein said compound is complexed with a radionuclide.
- 26 15. The compound of claim 4, wherein m is 1; n is 1; R¹ is hydrogen; and R is -(CH₂)_d-R₈₀;

WO 2005/079866 PCT/US2005/004448

wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

- 3 16. The compound of claim 4, wherein R is an amino acid radical.
- 4 17. The compound of claim 4, wherein R is an amino acid radical; m is 1; and n is 1.
- 5 18. The compound of claim 4, wherein R is an amino acid radical; m is 1; n is 1; and R¹ is hydrogen.
- 7 19. The compound of claim 4, wherein R is an amino acid radical; m is 1; n is 1; R¹ is hydrogen; wherein said compound is complexed with a radionuclide.
- The compound of claim 4, wherein R is an amino acid radical; m is 1; n is 1; R¹ is hydrogen; wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.
- 12 21. The compound of claim 4, wherein the amino acid radical is -CH₂CH₂CH₂CH₂CH(NH₂)CO₂H.
- 14 22. The compound of claim 4, wherein the amino acid radical is
 -CH(CO₂H)CH₂CH₂CH₂CH₂NH₂.
- 16 23. The compound of claim 4, wherein the amino acid radical is -CH₂CH₂CO₂H.
- The compound of claim 4, wherein the amino acid radical is

 -CH(CO₂H)(CH₂)_xCH(NH₂)CO₂H, wherein x is an integer from 3 to 9 inclusively.
- 19 25. A compound represented by B:

21 B

22 wherein

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23 R is $-CH_2CH_2CH_2CH_2CH(NH_2)CO_2H$;

	m is 1;
	n is 1;
	R ¹ is hydrogen;
	said compound is complexed with a radionuclide; and
	said radionuclide is technetium or rhenium.
26.	A compound represented by C:
	$L \underset{n}{\overset{R}{\vee}} \underset{n}{\overset{L}{\vee}} \underset{m}{\overset{R}{\vee}} Z$
	${f C}$
	wherein
	R is H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, thioalkyl, alkenyl, alkynyl, aryl,
	heteroaryl, aralkyl, heteroaralkyl, acyl, aminoacyl, hydroxyacyl, thioacyl, -CO ₂ H, -
	(CH ₂) _d -R ₈₀ , or an amino acid radical;
	R ₈₀ is independently for each occurrence carboxaldehyde, carboxylate, carboxamido,
	alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl
	heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid,
	(deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor;
	d is an integer in the range 0 to 12 inclusive;
	m is an integer in the range 0 to 6 inclusive;
	n is an integer in the range 0 to 6 inclusive;
	Z is thioalkyl, carboxylate, 2-(carboxy)aryl, 2-(carboxy)heteroaryl, 2-(hydroxy)aryl, 2-
	(hydroxy)heteroaryl, 2-(thiol)aryl, or 2-(thiol)heteroaryl; and
	L is selected from the group consisting of
	26.

$$\begin{array}{c} R_1 \\ R_1 \\$$

each instance of R¹ is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, alkyl thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and -(CH₂)_d-R₈₀.

- 11 27. The compound of claim 26, wherein said compound is complexed with a radionuclide.
- The compound of claim 26, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.
- 14 29. A compound represented by **D**:

16 D

wherein

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WO 2005/079866 PCT/US2005/004448

R is H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, thioalkyl, alkenyl, alkynyl, aryl,

- 2 heteroaryl, aralkyl, heteroaralkyl, acyl, aminoacyl, hydroxyacyl, thioacyl, -CO₂H, -
- 3 (CH₂)_d-R₈₀, or an amino acid radical;
- 4 R₈₀ is independently for each occurrence carboxaldehyde, carboxylate, carboxamido,
- alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl,
- 6 heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid,
- 7 (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor;
- 8 d is an integer in the range 0 to 12 inclusive;
- m is an integer in the range 0 to 6 inclusive;
- n is an integer in the range 0 to 6 inclusive;
- Z is thioalkyl, carboxylate, 2-(carboxy)aryl, 2-(carboxy)heteroaryl, 2-(hydroxy)aryl, 2-
- 12 (hydroxy)heteroaryl, 2-(thiol)aryl, or 2-(thiol)heteroaryl; and
- each instance of R¹ is selected independently from the group consisting of halogen, alkyl,
- alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro,
- sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl,
- 16 carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl,
- selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal,

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- amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide,
- hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea,
- 20 and $-(CH_2)_d-R_{80}$.
- 21 30. The compound of claim 29, wherein said compound is complexed with a radionuclide.
- 22 31. The compound of claim 29, wherein said compound is complexed with a radionuclide,
- wherein said radionuclide is technetium or rhenium.
- 24 32. The compound of claim 29, wherein Z is carboxylate.
- 25 33. The compound of claim 29, wherein m is 1.
- 26 34. The compound of claim 29, wherein n is 1.
- 27 35. The compound of claim 29, wherein m is 1; and n is 1.

- 1 36. The compound of claim 29, wherein Z is carboxylate; m is 1; and n is 1.
- 2 37. The compound of claim 29, wherein R¹ is hydrogen.
- 3 38. The compound of claim 29, wherein Z is carboxylate; m is 1; n is 1; and R¹ is hydrogen.
- 4 39. The compound of claim 29, wherein R is $-(CH_2)_d-R_{80}$.
- 5 ... 40. The compound of claim 29, wherein Z is carboxylate; m is 1; n is 1; R¹ is hydrogen; and
- 6 R is $-(CH_2)_d R_{80}$.
- 7 41. The compound of claim 29, wherein Z is carboxylate; m is 1; n is 1; R¹ is hydrogen; and
- R is -(CH₂)_d-R₈₀; wherein said compound is complexed with a radionuclide.
- 9 42. The compound of claim 29, wherein Z is carboxylate; m is 1; n is 1; R¹ is hydrogen; and
- R is -(CH₂)_d-R₈₀; wherein said compound is complexed with a radionuclide, wherein said
- radionuclide is technetium or rhenium.
- 12 43. The compound of claim 29, wherein R is an amino acid radical.
- 13 44. The compound of claim 29, wherein R is an amino acid radical; m is 1; and n is 1.
- 14 45. The compound of claim 29, wherein R is an amino acid radical; m is 1; n is 1; and R¹ is
- 15 hydrogen.
- 16 46. The compound of claim 29, wherein R is an amino acid radical; m is 1; n is 1; and R¹ is
- hydrogen; wherein said compound is complexed with a radionuclide.
- 18 47. The compound of claim 29, wherein R is an amino acid radical; m is 1; n is 1; and R¹ is
- hydrogen; wherein said compound is complexed with a radionuclide, wherein said
- 20 radionuclide is technetium or rhenium.
- 21 48. The compound of claim 29, wherein the amino acid radical is
- -CH₂CH₂CH₂CH₂CH(NH₂)CO₂H.
- 23 49. The compound of claim 29, wherein the amino acid radical is
- $-CH(CO_2H)CH_2CH_2CH_2CH_2NH_2. \\$
- 25 50. The compound of claim 29, wherein the amino acid radical is -CH₂CH₂CO₂H.
- 26 51. The compound of claim 29, wherein the amino acid radical is

-CH(CO₂H)(CH₂)_xCH(NH₂)CO₂H, wherein x is an integer from 3 to 9 inclusively.

2 52. A compound represented by E:

E

5 wherein

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6 m is an integer in the range 0 to 6 inclusive;

7 n is an integer in the range 0 to 6 inclusive;

p is an integer in the range of 1 to 10 inclusive;

9 Z is selected from the group consisting of -CH₂COOH, alkyl, aryl, aralkyl,

$$R^1$$
 R^1
 R^1

L is selected from the group consisting of

$$R^1$$
 R^1
 R^1

WO 2005/079866

each instance of R¹ is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and -(CH₂)_d-R₈₀;

R₈₀ represents independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor; and d is an integer in the range 0 to 12 inclusive.

- 15 53. The compound of claim 49, wherein said compound is complexed with a radionuclide.
- The compound of claim 49, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.

- 18 55. The compound of claim 49, wherein L is $R^1 \cap N^2 \cap R^1$ is hydrogen; and Z is alkyl.
- 19 56. A compound represented by F:

PCT/US2005/004448 WO 2005/079866

wherein 3

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m is independently for each occurrence an integer in the range 0 to 6 inclusive;

n is an integer in the range 0 to 6 inclusive;

L is independently for each occurrence selected from the group consisting of

$$R^{1}$$
 R^{1}
 R^{1

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each instance of R¹ is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, carboxyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, u rea, thiourea, and $-(CH_2)_d-R_{80}$;

PCT/US2005/004448

- 1 R₈₀ is independently for each occurrence carboxaldehyde, carboxylate, carboxamido,
- alkoxycarbonyl, a ryloxycarbonyl, a mmonium, a ryl, h eteroaryl, c ycloalkyl, c ycloalkenyl,
- 3 heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid,
- 4 (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor; and
- d is an integer in the range 0 to 12 inclusive.
- 6 57. The compound of claim 56, wherein m is 1.
- 7 58. The compound of claim 56, wherein n is 1.

8 59. The compound of claim 56, wherein L is $R^{1} \cap N^{2}$; and R^{1} is hydrogen.

- 9 60. The compound of claim 56, wherein L is R¹ N ; R¹ is hydrogen, m is 1; and n is 1.
- 11 61. The compound of claim 56, wherein said compound is complexed with a radionuclide.
- 12 62. The compound of claim 56, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.
- 14 63. A compound represented by G:

- 16 G
- wherein

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- R is H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, thioalkyl, alkenyl, alkynyl, aryl,
- heteroaryl, aralkyl, heteroaralkyl, acyl, aminoacyl, hydroxyacyl, thioacyl, -CO₂H, -
- 20 (CH₂)_d-R₈₀, or an amino acid radical;

WO 2005/079866 PCT/US2005/004448

R₈₀ is independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, a ryloxycarbonyl, a mmonium, a ryl, h eteroaryl, c ycloalkyl, c ycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor;

- d is an integer in the range 0 to 12 inclusive;
- m is independently for each occurrence an integer in the range 0 to 6 inclusive;
- 7 n is an integer in the range 0 to 6 inclusive;

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L is independently for each occurrence selected from the group consisting of

$$R^{1}$$
 R^{1}
 R^{1

each instance of R¹ is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, u rea, thiourea, and -(CH₂)_d-R₈₀.

- 19 64. The compound of claim 63, wherein m is 1.
- 20 65. The compound of claim 63, wherein n is 1.

1 66. The compound of claim 63, wherein R is hydrogen.

2 67. The compound of claim 63, wherein L is R¹ N ; and R¹ is hydrogen.

- The compound of claim 63, wherein L is R¹ N ; R¹ is hydrogen; m is 1; n is 1; and R is hydrogen.
- 5 69. The compound of claim 63, wherein said compound is complexed with a radionuclide.
- 70. The compound of claim 63, wherein said compound is complexed with a radionuclide, wherein said radionuclide is technetium or rhenium.
- 8 71. A compound represented by H:

$$L \xrightarrow{M} N \xrightarrow{N} N \xrightarrow{N} M$$

$$H$$

11 wherein

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R is hydrogen, halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, or -(CH₂)_d-R₈₀;

R² represents a moiety comprising a neutral or anionic Lewis base, H, alkyl, hydroxyalkyl, alkoxyalkyl, aminoalkyl, thioalkyl, alkenyl, alkynyl, aryl, heteroaryl, aralkyl, heteroaralkyl, acyl, aminoacyl, hydroxyacyl, thioacyl, (amino)alkoxycarbonyl,

1 (hydroxy)alkoxycarbonyl, (amino)alkylaminocarbonyl, (hydroxy)alkylaminocarbonyl, 2 -CO₂H, -(CH₂)_d-R₈₀, or an amino acid radical;

R₈₀ is independently for each occurrence carboxaldehyde, carboxylate, carboxamido, alkoxycarbonyl, aryloxycarbonyl, ammonium, aryl, heteroaryl, cycloalkyl, cycloalkenyl, heterocyclyl, polycyclyl, amino acid, peptide, saccharide, ribonucleic acid, (deoxy)ribonucleic acid, or a ligand for a G-protein-coupled receptor;

d is an integer in the range 0 to 12 inclusive;

m is an integer in the range 0 to 6 inclusive;

n is an integer in the range 0 to 6 inclusive;

L is independently for each occurrence selected from the group consisting of

$$R_1$$
 R_1
 R_1

each instance of R^1 is selected independently from the group consisting of halogen, alkyl, alkenyl, alkynyl, hydroxyl, alkoxyl, acyl, acyloxy, acylamino, silyloxy, amino, nitro, sulfhydryl, alkylthio, imino, amido, phosphoryl, phosphonate, phosphine, carbonyl, carboxyl, carboxamide, anhydride, silyl, thioalkyl, alkylsulfonyl, arylsulfonyl, selenoalkyl, ketone, aldehyde, ester, heteroalkyl, cyano, guanidine, amidine, acetal, ketal, amine oxide, aryl, heteroaryl, aralkyl, heteroaralkyl, azido, aziridine, carbamoyl, epoxide, hydroxamic acid, imide, oxime, sulfonamide, thioamide, thiocarbamate, urea, thiourea, and $-(CH_2)_d$ -R₈₀.

- The compound of claim 71, wherein m is 1.
- 2 73. The compound of claim 71, wherein n is 1.
- 3 74. The compound of claim 71, wherein R is hydrogen or -(CH₂)_d-R₈₀.
- 4 75. The compound of claim 71, wherein R² is a moiety comprising an anionic Lewis base
- 5 76. The compound of claim 71, wherein R² is a carboxylate, thiolate, or phenolate

$$R^1$$
 R^1
 R^1

6 77. The compound of claim 71, wherein L is R¹ N ; and R¹ is hydrogen.

$$R^1$$
 R^1 R^1

- 7 78. The compound of claim 71, wherein L is R¹ N ; R¹ is hydrogen; m is 1; n is 1;
- R is hydrogen or $-(CH_2)_d$ -R₈₀; and R² is a carboxylate, thiolate, or phenolate.
- 9 79. The compound of claim 71, wherein said compound is complexed with a radionuclide.
- 10 80. The compound of claim 71, wherein said compound is complexed with a radionuclide, 11 wherein said radionuclide is technetium or rhenium.
- 12 81. A formulation, comprising a compound according to any of claims 1-80; and a
 13 pharmaceutically acceptable excipient.
- 14 82. A method of imaging a region in a patient, comprising the steps of: administering to a

 patient a diagnostically effective amount of a compound of claim 2, 3, 5, 6, 27, 28, 30, 31,
- 16 53, 54, 61, 62, 69, 70, 79 or 80; and obtaining an image of said region of said patient.
- 17 83. The method of claim 82, wherein said region of said patient is the head or thorax.
- 18 84. A method of preparing a peptide conjugate incorporating a compound of claim 16, 25, 43 19 or 52, wherein the peptide conjugate is prepared using solid phase synthetic techniques.